

REPORT OF THE COUNCIL TO THE SEVENTY-FIFTH ANNUAL
GENERAL MEETING OF THE SOCIETY.

The following table shows the progress and present state of
the Society :—

	Compounders	Annual Subscribers	Mathematical Society	Total Fellows	Associates	Patron	Grand Total
December 31, 1893	249	386	1	636	46	1	683
Since elected	+ 5	+ 30	...	...	+ 2	...	...
Deceased	— 9	— 8	...	...	...	...	...
Resigned ... ..	...	— 8	...	...	...	...	...
Removals	+ 2	— 2	...	...	...	...	...
Expelled ... ..	...	— 6	...	...	...	...	...
December 31, 1894	247	392	1	640	48	1	689

Dr. Common's Account as Treasurer of the Royal

RECEIPTS.

Balances, 1894 January 1:—	£	s.	d.	£	s.	d.
At Bankers', as per Pass Book	365	15	11			
In hand of Assistant Secretary on account of Turnor and Horrox Fund	11	2	3			
In hand of Assistant Secretary on Petty Cash Account	0	1	4			
				376	19	6
Dividends on £13,200 Consols, 2½ per cent. ...	351	13	6			
„ on £900 New 2½-per-cent. Stock ...	20	5	8			
„ on £1,250 Metropolitan 3-per-cent. Stock ...	36	5	10			
				408	5	0
Received on account of Subscriptions:—						
Arrears	155	8	0			
Annual Contributions for 1894	571	4	0			
„ „ 1895	4	4	0			
Admission Fees	67	4	0			
First Contributions	46	4	0			
				844	4	0
Composition Fees				147	0	0
Sales of Publications:—						
At Williams & Norgate's, 1893	14	19	3			
At Society's Rooms, 1894	41	8	6			
				56	7	9
Income Tax refunded by Commissioners of Inland Revenue				11	14	7

Audited and found correct, 1895 January 7.

W. B. GIBBS,
H. P. HOLLIS,
J. E. DROWER.

£1,844 10 10

Astronomical Society, from 1894 January 1 to December 31.

EXPENDITURE.

	£	s.	d.	£	s.	d.
Assistant Secretary: Salary	250	0	0			
" " for assistance in editing						
Society's Publications	50	0	0			
	<hr/>			300	0	0
House Duty	2	12	6			
Fire Insurance	7	16	6			
	<hr/>			10	9	0
Printing	393	2	0			
Plates (Woodbury type)	15	17	6			
	<hr/>			408	19	6
Turnor and Horrox Fund: Purchases for Library	17	13	8			
Binding Books in Library	28	3	0			
Copying Photographs	5	18	0			
	<hr/>			51	14	8
Eclipse Expedition: Balance of Expenses...				12	12	4
Clerk's Wages	40	17	6			
Postage and Telegrams	67	18	3			
Carriage of Parcels	4	3	5			
Stationery and Office Expenses	11	5	8			
	<hr/>			124	4	10
Expenses of Meetings	20	0	0			
Lantern Expenses	22	5	3			
	<hr/>			42	5	3
House Expenses	61	7	4			
Coals and Gas	52	18	6			
Electric Light Expenses	13	6	2			
Rental of Wire for Time Signal	5	0	0			
Furniture, Fittings and Repairs	40	10	1			
Sundries	7	7	3			
	<hr/>			180	9	4
Lee and Janson Fund Grants	24	0	0			
Balance of Mrs. Jackson Gwilt's Annuity	1	7	0			
	<hr/>			25	7	0
Purchase of £250 New 2½-per-cent. Stock, at 97 $\frac{7}{8}$,						
including Commission				245	1	3
Bankers' deductions on cheques				0	1	10
Balances, 1894 December 31:—						
At Bankers', as per Pass Book	391	15	1			
Country Cheque not credited till 1895	23	2	0			
In hand of Assistant Secretary on account						
of Turnor and Horrox Fund	13	8	7			
In hand of Assistant Secretary on Petty						
Cash Account	15	0	2			
	<hr/>			443	5	10
	<hr/>			<hr/>		
				£1,844	10	10
				<hr/>		

Report of the Auditors.

We have examined the Treasurer's accounts for the year 1894, and have found and certified the same to be correct. The cash in hand on 1894 December 31, including the balance at the bankers', &c., amounted to £443 5s. 10d.

The funded property of the Society has been increased during the last year by the purchase of £250 new $2\frac{1}{2}$ per cent. stock.

The books, instruments, and other effects in the possession of the Society have been examined, and they appear to be in a satisfactory condition.

We have laid on the table a list of the names of those Fellows who are in arrears for sums due at the last Annual General Meeting of the Society, with the amount due against each Fellow's name.

(Signed) W. B. GIBBS,
J. E. DROWER,
H. P. HOLLIS.

January 7, 1895.

Trust Funds.

The Turnor Fund: A sum of £450 $2\frac{3}{4}$ -per-cent. Consols, the interest to be used in the purchase of books for the Library.

The Horrox Memorial Fund: A sum of £100 $2\frac{3}{4}$ -per-cent. Consols, the interest to be used in the purchase of books for the Library.

The Lee and Janson Fund: A sum of £323 16s. 6d. $2\frac{3}{4}$ -per-cent. Consols, the interest to be given by the Council to the widow or orphan of any deceased Fellow or Associate of the Society who may stand in need of it.

The Hannah Jackson (née Gwilt) Fund: A sum of £300 $2\frac{3}{4}$ -per-cent. Consols, the interest to be given in medals or other awards, in accordance with the terms of the Trust.

Assets and Present Property of the Society, 1895 January 1.

	£	s.	d.	£	s.	d.
Balances, 1894 December 31:—						
At Bankers', as per Pass Book	391	15	1			
Outstanding cheque	23	2	0			
In hand of Assistant Secretary on account of						
Turnor and Horrox Funds	13	8	7			
In hand of Assistant Secretary on Petty Cash						
Account	15	0	2			
				443	5	10
Due on account of Subscriptions:—						
11 Contributions of 4 years' standing	92	8	0			
9 " 3 " 	56	14	0			
28 " 2 " 	117	12	0			
63 " 1 " 	132	6	0			
2 Admission Fees, &c....	6	6	0			
	405	6	0			
Less 2 Contributions paid in advance	4	4	0			
				401	2	0
Due from Messrs. Williams & Norgate for sales of Publications during 1894				7	3	7
£13,200 2¼-per-cent. Consols, including the Turnor and Horrox Memorial Fund, the Lee and Janson Fund, and the Jackson Gwilt Fund.						
£900 New 2½-per-cent. Consols.						
£1,250 Metropolitan 3-per-cent. Stock.						
Astronomical and other Manuscripts, Books, Prints, and Instruments; Furniture, &c.						
Unsold Publications of the Society.						
2 Gold Medals.						

Stock in hand of volumes of the *Memoirs*.—

Vol.	At Society's Rooms	At Williams & Norgate's	Vol.	At Society's Rooms	At Williams & Norgate's
I. Part 1	7	...	XXX.	155	...
I. Part 2	42	...	XXXI.	138	...
II. Part 1	51	3	XXXII.	150	...
II. Part 2	17	3	XXXIII.	158	1
III. Part 1	65	1	XXXIV.	161	3
III. Part 2	83	1	XXXV.	106	4
IV. Part 1	78	3	XXXVI.	189	8
IV. Part 2	90	3	XXXVII.	335	8
V.	102	3	Part 1 XXXVII.	280	8
VI.	120	6	Part 2 XXXVIII.	265	1
VII.	142	3	XXXIX.	233	3
VIII.	126	3	Part 1 XXXIX.	238	3
IX.	133	3	Part 2 XL.	256	1
X.	145	...	XLI.	404	1
XI.	152	...	XLII.	229	3
XII.	159	...	XLIII.	231	1
XIII.	158	...	XLIV.	210	1
XIV.	365	...	XLV.	244	...
XV.	137	...	XLVI.	224	3
XVI.	163	1	XLVII. Part 1	3	...
XVII.	146	1	XLVII. Part 2	18	...
XVIII.	138	1	XLVII. Part 3	2	...
XIX.	148	...	XLVII. Part 4	10	...
XX.	137	1	XLVII. Part 5	8	...
XXI. Part 1	310	...	XLVII. Part 6	9	...
XXI. Part 2	98	...	XLVII.	199	2
XXI. 1 & 2 (together)	59	...	XLVIII.	240	1
XXII.	161	1	Part 1 XLVIII.	245	1
XXIII.	145	1	Part 2 XLIX.	407	1
XXIV.	152	1	Part 1 XLIX.	277	2
XXV.	162	...	Part 2 L.	289	1
XXVI.	168	1	Index to Memoirs }	630	3
XXVII.	420	1			
XXVIII.	379	...			
XXIX.	401	...			

Stock in hand of volumes of the *Monthly Notices*.—

Vol.	At Society's Rooms	At Williams & Norgate's	Vol.	At Society's Rooms	At Williams & Norgate's
I.	57	...	XXIX.	51	...
II.	59	...	XXX.	64	2
III.	...	...	XXXI.	93	...
IV.	...	...	XXXII.	112	5
V.	...	...	XXXIII.	94	...
VI.	45	...	XXXIV.	66	1
VII.	2	...	XXXV.	55	...
VIII.	153	2	XXXVI.	28	1
IX.	24	3	XXXVII.	35	3
X.	172	1	XXXVIII.	98	2
XI.	184	...	XXXIX.	95	...
XII.	106	2	XL.	108	3
XIII.	177	2	XLI.	108	5
XIV.	176	3	XLII.	117	1
XV.	168	2	XLIII.	114	2
XVI.	154	2	XLIV.	117	2
XVII.	167	1	XLV.	119	1
XVIII.	244	...	XLVI.	114	...
XIX.	52	...	XLVII.	132	2
XX.	32	...	XLVIII.	124	1
XXI.	16	...	XLIX.	118	9
XXII.	31	...	L.	120	11
XXIII.	18	...	LI.	121	9
XXIV.	23	...	LII.	119	12
XXV.	14	...	LIII.	121	17
XXVI.	10	1	LIV.	123	25
XXVII.	3	...	Index ...	559	5
XXVIII.	70	...			
LIBRARY CATALOGUE				566	2

In addition to the above volumes of the *Monthly Notices*, the Society has a considerable stock of separate numbers of nearly all the volumes. With the exception, however, of Vols. XXXVI. to LIV., no complete volumes can be formed from the separate numbers in stock.

Instruments belonging to the Society.

A brief description of the chief instruments and other particulars relating to them will be found in *Monthly Notices*, vol. xxxvi. p. 126.

- No. 1. The *Harrison* clock.
 „ 2. The *Owen* portable circles, by Jones.
 „ 3. The *Beaufoy* circle.
 „ 4. The *Beaufoy* transit instrument.
 „ 5. The *Herschel* 7-foot telescope.
 „ 6. The *Greig* universal instrument, by Reichenbach and Ertel. The transit telescope, by Utzschneider and Fraunhofer, of Munich.
 „ 7. The *Smeaton* equatorial.
 „ 8. The *Cavendish* apparatus.
 „ 9. The 7-foot Gregorian telescope (late Mr. Shearman's).
 „ 10. The variation transit instrument (late Mr. Shearman's).
 „ 11. The universal quadrat, by Abraham Sharp.
 „ 12. The *Fuller* theodolite.
 „ 13. The standard scale, by Troughton and Simms.
 „ 14. The *Beaufoy* clock, No. 1.
 „ 15. The *Beaufoy* clock, No. 2.
 „ 16. The *Wollaston* telescope.
 „ 17. The *Lee* circle.
 „ 18. The *Sharpe* reflecting circle.
 „ 19. The *Brisbane* circle.
 „ 20. The *Baker* universal equatorial.
 „ 21. The *Reade* transit.
 „ 22. The *Matthew* equatorial, by Cooke.
 „ 23. The *Matthew* transit instrument.
 „ 24. The *South* transit instrument.
 „ 25. A sextant, by Bird (formerly belonging to Captain Cook).
 „ 26. A globe showing the precession of the equinoxes.
 The *Sheepshanks* collection :—
 „ 27. (1) 30-inch transit instrument, by Simms, with level and two iron stands.
 „ 28. (2) 6-inch transit theodolite, with circles divided on silver; reading microscopes, both for altitude and azimuth; cross and siding levels; magnetic needle; plumb-line; portable clamping foot and tripod stand.
 „ 29. (3) Equatorial stand and clock movement for $4\frac{6}{10}$ -inch telescope (telescope lost); double-image micrometer; two wire micrometers; object-glass micrometer.

- No. 30. (4) $3\frac{1}{4}$ -inch achromatic telescope, with equatorial stand ; double-image micrometer ; one terrestrial and three astronomical eyepieces.
- „ 31. (5) $2\frac{3}{4}$ -inch achromatic telescope, with stand ; one terrestrial and three astronomical eyepieces.
- „ 33. (7) 2-foot navy telescope.
- „ 34. (8) Transit instrument of 45 inches focal length, with iron stand and also Ys for fixing to stone piers ; two axis levels.
- „ 35. (9) Repeating theodolite, by Ertel, with folding tripod stand.
- „ 36. (10) 8-inch pillar sextant, by Troughton, divided on platinum, with counterpoise stand and artificial horizon.
- „ 37. (11) Portable zenith telescope and stand, $2\frac{3}{4}$ -inch aperture and 26 inches focal length ; 10-inch horizontal circle and 8-inch vertical circle, read to $10''$ by two verniers to each circle.
- „ 38. (12) 18-inch Borda repeating circle, by Troughton, $2\frac{1}{8}$ -inch aperture and 24 inches focal length ; the circles divided on silver, the horizontal circle being read by four verniers, and the vertical circle by three verniers, each to $10''$.
- „ 39. (13) 8-inch vertical repeating circle, with diagonal telescope, by Troughton and Simms ; circle divided on silver, reading to $10''$; a 5-inch circle at eye-end, reading to single minutes ; horizontal circle 9 inches diameter in brass, reading to single minutes.
- „ 40. (14) A set of surveying instruments, consisting of a 12-inch theodolite for horizontal angles only, reading to $10''$; two sets of adjusting plates ; tripod stand with enclosed telescope ; heavy stand for theodolite ; Y piece of level ; two large and three small ground-glass bubbles divided ; level collimator, object-glass $1\frac{5}{8}$ -inch diameter and 16 inches focal length ; micrometer eyepiece, comb, and wires ; mercury bottle and trough.
- „ 41. (15) Level collimator, with object-glass $1\frac{7}{8}$ -inch diameter and 16 inches focal length ; stand, rider-level, and fittings.
- „ 42. (16) 10-inch reflecting circle by Troughton, reading by three verniers to $20''$; counterpoise stand ; artificial horizon, with mercury ; two tripod stands.
- „ 43. (17) Hassler's reflecting circle, by Troughton, with counterpoise stand.
- „ 44. (18) 6-inch reflecting and repeating circle, by Troughton and Simms, contained in three boxes, two of which form stands. Circle divided on silver, reading to single minutes ; two inside arcs divided to single degrees, 150 degrees on each side ; artificial horizon and mercury.
- „ 45. (19) 5-inch reflecting and repeating circle, by Lenoir, of Paris.

- No. 46. (20) Reflecting circle, by Jecker, of Paris, 11 inches in diameter, with one vernier reading to 15".
- „ 47. (21) Box sextant; reflecting plane and level.
- „ 48. (22) Prismatic compass, by Troughton and Simms.
- „ 49. (23) Mountain barometer.
- „ 50. (24) Prismatic compass, by Thomas Jones, mounted with a cylindrical lens.
- „ 51. (25) Ordinary $4\frac{1}{2}$ -inch compass with needle.
- „ 52. (26) Dipping needle, by Robinson.
- „ 53. (27) Compass needle, mounted for variation.
- „ 54. (28) Magnetic intensity needle, by Meyerstein, of Göttingen; a strongly fitted brass box with heavy magnet; filar suspension.
- „ 55. (29) Box of magnetic apparatus.
- „ 56. (30) Hassler's reflecting circle, by Troughton; a $10\frac{1}{2}$ -inch reflecting and repeating circle, with stand and counterpoise, divided on platinum with two movable and two fixed indices; four verniers reading to 10".
- „ 57. (31) Box sextant and glass plane artificial horizon, by Troughton and Simms.
- „ 58. (32) Plane $2\frac{3}{8}$ -inch speculum, artificial horizon and stand.
- „ 59. (33) $2\frac{1}{2}$ -inch circular level horizon, by Dollond.
- „ 60. (34) Artificial horizon, roof, and trough; the trough $8\frac{1}{4}$ by $4\frac{1}{2}$ inches; tripod stand.
- „ 61. (35) Set of drawing instruments, consisting of 6-inch circular protractor and common protractor, T-square; one beam compass.
- „ 62. (36) A pantograph.
- „ 63. (37) A noddy.
- „ 64. (38) A small Galilean telescope with object-glass of rock crystal.
- „ 65. (39) Five levels.
- „ 66. (40) 18-inch celestial globe.
- „ 67. (41) Varley stand for telescope.
- „ 69. (43) Telescope, with object-glass of rock crystal.
- „ 71. Portable altazimuth tripod.
- „ 72. Four polarimeters.
- „ 74. Registering spectroscope, with one large prism.
- „ 76. Two five-prism direct-vision spectroscopes.
- „ 78. $9\frac{1}{4}$ -inch silvered-glass reflector and stand, by Browning.
- „ 79. Spectroscope.
- „ 80. A small box, containing three square-headed Nicol's prisms; two Babinet's compensators; two double-image prisms; three Savarts; one positive eyepiece, with Nicol's prism; one dark wedge.
- „ 81. A back-staff, or Davis' quadrant.
- „ 82. A nocturnal or star dial.
- „ 83. An early non-achromatic telescope, of about 3 feet focal length, in oak tube, by Samuel Scatliffe, London.

- No. 84. A Hollis observing chair.
- „ 85. Double-image micrometer, by Troughton and Simms.
- „ 86. $4\frac{1}{2}$ -inch Gregorian reflecting telescope, by Short, with altazimuth stand and 6-inch altitude and azimuth circles and two eyepieces.
- „ 87. $3\frac{1}{4}$ -inch Gregorian reflecting telescope with wooden tripod stand.
- „ 88. Pendulum, with 5-foot brass suspension rod, working on knife-edges, by Thomas Jones.
- „ 89. A Rhabdological Abacus. A contrivance invented by Mr. H. Goodwyn, consisting of a box filled with compartments, in which are square rods covered with numbers, which can be arranged so as to facilitate the labour of multiplying high numbers.
- „ 90. An Arabic celestial globe of bronze, $5\frac{3}{4}$ inches in diameter.
- „ 91. Astronomical time watch case, by Professor Chevalier.
- „ 92. 2-foot protractor, with two movable arms, and vernier.
- „ 93. Beam compass, in box.
- „ 94. 2-foot navigation scale.
- „ 95. Stand for testing measures of length.
- „ 96. Artificial planet and star, for testing the measurement of a fixed distance at different position-angles.
- „ 97. 12-cell Leclanché battery.
- „ 98. 2-foot 6-inch navy telescope, with object-glass $2\frac{1}{2}$ inches, by Cooke, with portable wooden tripod stand.
- „ 99. 12-inch transit instrument, by Fayrer and Son, with level and portable stand.
- „ 100. 9-inch transit instrument, with level and iron stand.
- „ 101. Small equatorial sight instrument, by G. Adams, London.
- „ 102. Sun-dial, by Troughton.
- „ 103. Sun-dial, by Casella.
- „ 104. Sun-dial.
- „ 105. Box sextant, by Troughton and Simms.
- „ 106. Prismatic compass, by Schmalcalder, London.
- „ 107. Compass, by C. Earle, Melbourne.
- „ 108. Prismatic compass, by Negretti and Zambra.
- „ 109. Dipleidoscope, by E. Dent.
- „ 110. Abney level, by Elliott.
- „ 111. Pocket spectroscope, by Browning.
- „ 112. Universal sun-dial.
- „ 113. Double sextant, by Jones.
- „ 114. Two models, illustrating the effects of circular motions.
- „ 115. A cometarium.
- „ 117. } Two old sun-dials.
- „ 118. }
- „ 119. Specimens of diffraction gratings, by Prof. W. A. Rogers.
- „ 120. A 6-prism spectroscope, by Browning.

- No. 121. Spitta's improved maximum and minimum thermometer.
 „ 122. A 6-inch speculum, with flat ; the speculum said to be by Sir W. Herschel, and re-figured by Sir J. Herschel.
 „ 123. A 6-inch refracting telescope, by Grubb, with 3 eyepieces.
 „ 124. Position micrometer, by Cooke.
 „ 125. A 6-inch refracting telescope, by Simms, with eyepieces and solar diagonal.
 „ 126. $3\frac{1}{2}$ -inch portable refracting telescope, by Tulley, with tripod stand.
 „ 127. Globe representing the visible surface of the Moon, by John Russell, R.A. (1797).
 „ 128. Bichromate battery and Ruhmkorff coil.
 „ 129. Slater's improved armillary sphere, presented by Prof. Slater.
 „ 130. 10-inch brass pillar sextant, by Troughton, presented by Dr. Nevins, as executor of the late Mr. A. E. Nevins.
 „ 131. Double box sextant, by Cary, presented by Dr. Nevins, as executor of the late Mr. A. E. Nevins.

Besides the above, there is the following apparatus available for eclipse work :—

- 4 Slits for spectroscope.
- 2 Abney lenses used in photographing the corona.
- 2 Dallmeyer negative enlarging lenses.

The following instruments are lent, during the pleasure of the Council, to the undermentioned persons :—

- No. 4. The *Beaufoy* transit instrument, to the Observatory, Kingston, Canada.
 „ 10. Variation transit, to Mr. Maxwell Hall.
 „ 16. The *Wollaston* telescope, to Mr. R. Inwards.
 „ 22. The *Matthew* equatorial, to Mr. J. Brett.
 „ 23. The *Matthew* transit, to Captain W. Noble.
 „ 27. (1) 30-inch transit and stand, to Mr. B. T. Moore.
 „ 29. (3) Wire micrometer (No. 1), to Mr. C. Thwaites.
 „ „ Wire micrometer (No. 2), to Mr. Maxwell Hall.
 „ 30. (4) $3\frac{1}{4}$ -inch equatorial and stand, to Mr. E. B. Powell.
 „ „ Double-image micrometer, to Mr. Maxwell Hall.
 „ 31. (5) $2\frac{3}{4}$ -inch telescope and stand, to Mr. F. J. Wardale.
 „ 38. (12) 18-inch *Borda* repeating circle, to Mr. Maxwell Hall
 „ 42. (16) Artificial horizon, roof, and mercury bottle, to Mr. C. Thwaites.
 „ 43. (17) Hassler's reflecting circle, to Mr. B. T. Moore.
 „ 50. (24) Prismatic compass, to Mr. Maxwell Hall.
 „ 52. (26) Dipping needle, to Mr. Maxwell Hall.
 „ 54. (28) Magnetic intensity needle, to Mr. Maxwell Hall.

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- No. 57. (31) Box sextant and artificial horizon, to Mr. R. J. Lecky.
 „ 69. (43) Telescope with rock-crystal object-glass, to Dr. W. Huggins.
 „ 76. 5-prism direct vision hand spectroscope, to Mr. E. B. Knobel.
 „ 78. 9 $\frac{1}{4}$ -inch reflector and stand, to Mr. Maxwell Hall.
 „ 79. Spectroscope to Mr. Maxwell Hall.
 „ 85. Double-image micrometer, to Mr. B. T. Moore.
 „ 99. 12-inch portable transit instrument, to Mr. H. T. Vivian.
 „ 119. Specimens of diffraction gratings, to Mr. B. T. Moore.
 „ 120. 6-prism spectroscope, by Browning, to Mr. C. Thwaites.
 „ 123. 6-inch refractor, by Grubb (object-glass only) to Mr. W. E. Wilson.
 „ 125. 6-inch refractor by Simms, to Dr. A. A. Common.
 „ 126. 3 $\frac{1}{2}$ -inch portable refractor, by Tulley, to Mr. H. Sadler.

The Gold Medal.

The Council have awarded the Society's Gold Medal to Dr. Isaac Roberts, for his photographs of Star Clusters and Nebulæ.

Publications of the Society.

Volume LI., Part III. of the *Memoirs* has been published during the past year, containing the following paper:—

“Comparison of the Greenwich Ten-Year Catalogue (1880) with the Cape Catalogue (1880).” By H. H. Turner and H. P. Hollis.

The attention of foreign and American astronomers is requested to the following paragraph in the Report of the Council for 1879. It is against the rules of the Society to print any paper previously published: “The Council hope that the communication between English and foreign astronomers will continue to increase, but they take this opportunity of mentioning that some of the papers which have been received by the Society have not been printed, on account of their having been previously published abroad.”